Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.



1.914 A2P942 Cof. 2

PROSPECTUS

THE YEARBOOK OF AGRICULTURE 1959

FOOD AND HUMAN NUTRITION



Alfred Stefferud, Editor
Office of Information
The United States Department of Agriculture
Room 541, Administration Building
Washington 25, D. C.
(Telephone: 3298)

Please Note

Please read all of this prospectus before you write your chapter.

Manuscripts must be submitted on or before July 1, 1958.

The editor revises or rewrites manuscripts as he deems necessary and proper.

No promise is given now or later that a manuscript will be printed. Changing printing costs (but a fixed appropriation) may require changes in plans at any time.

Special instructions are included for typists. Double-space all parts of a manuscript. Do not run paragraphs over from one page to the next.

Remember the reader!

THE YEARBOOK OF AGRICULTURE 1959

The members of the 1959 Yearbook Committee are:

Georgian Adams, ARS

T. C. Byerly, ARS

Faith Clark, ARS

Martin D. Garber, AMS

Omer Hermann, AMS

George W. Irving, Jr., ARS

Ruth M. Leverton, ARS

Frances Scudder, FES

Alfred Stefferud, OI

Hazel K. Stiebeling, ARS, Chairman

Frederick Waugh, AMS

PURPOSE

Our aim is to give all Americans useful, complete, and unbiased information about the new developments that pertain to food and the science of nutrition.

We have a tremendous obligation and an exciting opportunity. More and more Americans (but not all) have come to appreciate the importance of proper eating to health, well-being, survival, and accomplishment.

This is a book for people. It is to be written, so people will read it, in clear, simple, and forceful English. Such writing is not "popular," cheap, or elementary - a distinction that some persons refuse or are unable to recognize.

NOTES FOR WRITERS

Nearly 300,000 copies of the Yearbook are printed. The book has an estimated million readers. No other publication has the same number and type of readers or offers such an opportunity to a scientist to discuss his work.

The importance of the publication and our subjects demands the fulfillment of several obligations in preparation of manuscript, attitude toward the assignment, promptness in submitting contributions and returning proofs, and fairness to colleagues.

We must bear in mind that the Yearbook is a cooperative venture of the Department of Agriculture. not one unit.

- 1. Our readers include farmers, city dwellers and others who have no prior interest in our subject but whose interest might be attracted, students, businessmen, economists, teachers, Government officials and others who need reference material, housewives, county agents, Congressmen, and writers.
- 2. Authors should allow ample time for the customary agency or Department clearance. The editor assumes that when a manuscript is submitted to him it is technically accurate and fully approved.

All manuscripts must be submitted by July 1, 1958. Anyone who has a reservation about meeting that deadline should not accept the invitation to contribute a chapter.

3. We cannot specify the exact length of a chapter. When we planned this book, we could not foresee the extent of rises in printing costs, on which (because our appropriation has not been increased accordingly) the number of pages and the use of illustrations depend. We shall not know until we get cost estimates a few weeks before press time how much space will be available - we are, in effect, planning, writing, and editing in the dark. Although another sharp increase might mean a book of many fewer pages, we hope we can have 600 pages of text (plus preliminary pages, index, and space for chapter titles).

Thus, on the basis of 60 chapters, the average length of manuscripts would be 6,000 words. Some chapters will be longer, and some will be shorter. The writer should use all the words he needs to discuss his subject completely, clearly, and interestingly. No one needs to resort to terms like "Space does not permit me to...."

The important point is to make every word count. Do not waste space on a long introduction. Long sentences are not bad in themselves, but they often indicate redundancy. Avoid summaries that merely repeat earlier material.

Organize your material carefully. Outline your article first; know beforehand what you are going to say; then say it. Get a logical train of thought and follow it. Rework your manuscript several times, asking yourself each time: Is this clear? Is it terse? If your outline is good, there is no need to backtrack.

Arcid verbosity and jargon in favor of simple, direct English (e.g., "soon" for "in the near future," "We learned" for "on the basis of a series of experiments it was demonstrated that...;" "in summer" instead of "during the warm summer months." and many more).

Avoid, as wasters of space, passive verbs. Good paragraphing, so that one discusses only one clearly identified point at a time, saves words. So do strong, active verbs, (e.g., "you can assume" instead of "it would seem possible one could make the assumption that").

4. Some suggestions about choice of words:

Avoid dangling participles (e.g., "Applying pressure to such infected berries, the skin slips away..." should be "Applying pressure, one causes the skin..."). Avoid beginning sentences with this or these when the antecedent is indefinite and remote. Do not overwork since when because or as can be used. Due to requires a definite noun: "The failure was due to lack of study." Avoid clauses like, "Many investigations showed that...." Giving the fact itself on your own responsibility is better. Under Florida conditions and similar phrases are jargon. Problems is overworked. Watch parallel construction - e.g., "The lesion was brown, sunken, and on the branches" should be "...brown, sunken, and persistent (or a third adjective). That and which often involve meaning, not merely style. Avoid using nouns as adjectives - a common practice that makes for heavy writing. Certain could better be some or a more precise term - at certain intervals: every 3 or 4 days; certain workers: some workers. Areas often is loosely used for districts, counties, localities, States, regions.

Define unusual terms the first time they are used by synonyms in parentheses or within commas or, even better, as a part of the next sentence.

Avoid abbreviations in the text as much as possible.

Do not be afraid of using I and other personal pronouns, which tend to give life to writing and make it more exact. "It was established in experiments at Blank University that...." could be "I learned...."

Avoid prepositional phrases at the beginnings of sentences.
"The study began in Florida in 1913..." instead of, "In 1913, a study was started..." Avoid phrases like "last year," "recently," "a few years ago." Be specific as to year; remember this volume will appear in 1959, but will be in circulation much longer than that. Consequently a term like "this spring" is almost meaningless.

Avoid saying in the text, "Brown's findings were..." or "Smith and Jones disproved the theory..." Instead, gain accuracy and completeness by a phrase like "Lyle P. Brown, in experiments at the Alabama Agricultural Experiment Station, discovered that..."

Unity, emphasis, and coherence still are important principles.

Science for April 27, 1956, contains an interesting article, "English Style in Scientific Papers," by John R. Baker (pages 713-714), which contributors might find helpful.

5. The introduction and conclusion require extra thought. The introduction, the vital paragraph that determines whether the reader will continue reading your article or whether, so to speak, all your effort will be wasted, might well be a short statement of one challenging fact. A good device is a one-sentence paragraph so compact that it requires no internal punctuation. The introduction, besides attracting the reader, lays the groundwork for what follows. Usually questions do not make good introductions. A narrative flavor is good. Avoid long, historical introductions; they are dull, overworked, and usually not pertinent to the main point of the article. It's much better to jump immediately into the article.

We do not use "learned journal" summaries; they waste space. They are unnecessary if the article is properly written. Experienced writers save out a particularly good fact from the main body for use in the conclusion - a fact that grows out of the text, looks forward, summarizes the main thought succinctly, and leaves a good feeling with the reader. Try for a pointed, crisp conclusion.

- 6. Material submitted for publication in the Yearbook must not be published or offered for publication elsewhere before it is printed in the Yearbook or is rejected by the editor. Please do not give your manuscript to another publisher or writer as background or ask the editor if you may do so.
- 7. The Yearbook Committee plans the scope of the volume.

Problems of writing, revision, presentation, duplication, illustration, and such are handled directly by author and editor after an article is submitted, not by or through a committee member or bureau official. There must always be the possibility of direct exchange between author and editor. Proofs must be returned directly and expeditiously to the editor.

All manuscripts are subject to revision by the editor. Usually they are returned to the authors before publication for comments, approval, additions (to keep them up-to-date), and corrections. Changes, however extensive, are always subject to the author's approval.

Changes are made primarily to remove duplication and repetition, eliminate wordiness and similar faults, enhance readability, and remove phrases, terms, and examples that are not objectionable in themselves but may be used in too many articles and so assume the nature of jargon.

No chapter known to be ghost-written or extensively revised by somebody other than the author or authors is printed in the Yearbook.

- 8. Contributors and other interested persons are invited to submit suggestions for papers not listed in this prospectus, which is not offered as a final, static document. We want our book to be up-to-date, fresh, living, and different not a rehash of old material.
- 9. Because the actual printing may take at least 6 months and the editing up to 6 months more, as much as a year elapses between the writing of an article and the appearance of the Yearbook. Authors, therefore, should follow through on their manuscripts and be sure that in each of its steps it remains accurate and up-to-date as of that particular date.
- 10. This prospectus is not a secret or restricted document, but a great deal of effort is saved if each person to whom it is sent will remember that it is for his own use only and not for wide discussion or announcement.
- ll. Entries in this outline are topics, not necessarily the titles of the articles. Titles that authors use on their manuscripts should be short, accurate, and attractive. Changes may be made in them to conform to typographic style yet to be chosen or to achieve succinctness and directness.
- 12. Subheads will follow the practice of recent Yearbooks. They are merely a line of space; the two or three key words that begin the next line are set in small capitals. The device saves up to 30 pages in the book and improves the appearance, particularly because of our narrow columns. Do not, therefore, use subheads as such in your manuscript. Subheads cannot be a substitute for good organization of thought and proper transition.
 - 13. We do not use footnotes.
- 14. We shall not use bibliographies and lists of publications for further reading as we have in some previous Yearbooks. Outstanding publications, which writers consider essential or of great historical importance, may be mentioned in the text; such references must be accurate and complete as to title, author, publisher, and year.
 - 15. Charts and line drawings may be submitted.

We try to get along without tables in the text. They are expensive to set, hard to set, hard to fit into our narrow columns, and generally unattractive. Often you can present the details in them more effectively as written matter; often they are submitted merely out of habit. If tables are submitted, nevertheless, they must be on separate sheets by thomselves, no matter how small. Tables, like charts and other "art" items, are set and handled separately. Do not use phrases like Fig. 3 or See Chart 6 in the text. All items - text, charts, tables - should be self-contained, with a minimum of cross-reference.

- 16. Please submit with your manuscript on a separate sheet a terse author's note that gives your name as you wish it to be printed, your position, and affiliation. Example: John C. McGillicuddy, Director, Office of Ways and Means, Beltsville, Md. If you wish, you may add other details about yourself (although not in sentence form e.g., Formerly professor of land economics, Blank University; author, You and Your Ulcer).
- 17. Details of obtaining reprints are not handled by the editor of the Yearbook. Consult your division of information regarding reprints or (if you are not in the Department of Agriculture) the Superintendent of Documents when the Yearbook is in print.
- 18. To save time and effort of all hands, it is suggested that contributors read some chapters in a Yearbook published since 1950. (No experienced writer would dream of submitting a manuscript to a magazine without reading some issues to ascertain its scope, flavor, makeup, and general style of writing.)

Do not follow too closely, however, any trick of writing, style of expression, or mechanical details you may discover in previous Yearbooks. Each Yearbook should be different from its predecessors and an improvement over them. A writer's own personality, flavor, and expressions are highly prized, and the editor makes every effort to preserve them.

- 19. Again, and always: Remember the reader! Nothing can justify dullness and obscurity.
- 20. The following notes on writing are excerpts from a booklet "The Publication of Research," issued by the Agricultural Research Administration in January 1945; the booklet reproduces a talk by the late Dr. E. W. Allen, who was chief of the Office of Experiment Stations from 1915 to 1929:

The purpose of writing is not only to express ideas, but to communicate them to others. Science is not inherently dull, heavy, and hard to comprehend; it is essentially fascinating, understandable, and full of charm. It is simple, after it has been worked out, and is capable of being stated in concise terms easily understood.

But to succeed in conveying ideas correctly and in a readable way requires considerable effort on the part of most of us. It calls for time to do it well. It is just as important as making more experiments, although the worker may not like it so well, and it is quite as worthy of his best effort.

The aim in publishing research, as well as in carrying it on, is to leave the field clearer than you found it. If that cannot be done, it is doubtful whether a scientific paper is justified. There cannot be clear writing without clear thinking, and when one learns to write clearly, he will in the process learn to think clearly. Indeed it may be doubted whether thought and its expression can be separated.

Clearness is absolutely essential in technical writing. It is not enough to use language that may be understood - it is necessary to use language that cannot be misunderstood.

Having something to say, therefore, say it in your own way, provided you use good diction, the right word, and a simple form of expression.

Remember the reader. Be sympathetic toward him. He must make some effort, but he is not bound to follow you through. The writer has not the same hold on his audience that the speaker has.

Brevity is another important quality of a technical paper. This does not mean that the presentation should not be adequate to a clear understanding of what is reported and ability of the reader to judge the merits of the contribution; but the length should be proportionate to the actual contribution. Nowhere are more skill and judgment required.

The question of what to leave out will be one for very careful consideration, which frequently cannot be settled at the first writing. On review it may be found that considerable may be left out without sacrificing anything really essential. Descriptions and statements of facts gain force by brevity and by sticking quite closely to the real kernel of the subject.

As a rule, the more definitely a fact has been established by an investigation, the more directly and simply it can be presented. It is the doubtful ones that have to be hedged about with explanations, qualifications, and cautions.

The style of the technical paper should be simple, straightforward, and dignified. It should suggest neither a fairy tale, a sensational newspaper story, nor a sermon, but rather a simple, unaffected, and uncolored account of work done and its application. Accuracy and clearness ought never to be sacrificed to a supposedly more popular style. The presentation should be such as to win the reader's confidence in the thoroughness and reliability of the work reported.

NOTES ON TYPING MANUSCRIPTS

The Style Manual (1953 Revision) of the Government Printing Office governs capitalization, compounding, spelling; abbreviations, punctuation, numerals, syllabication, and plant names.

The editor will need the ribbon copy and the first carbon copy. The ribbon copy should be on good bond paper, (not second sheets or onion skin) on which one can readily write with ink or pencil. The carbon copy must be perfectly legible. Use a fresh black ribbon. Please change carbon paper often.

All material should be double-spaced; single spacing is not permitted anywhere - not even in captions; at the bottom of pages or in tables. Single spacing allows no room for editing or marking instructions to the printer. Retype the page, if necessary.

Do not run a paragraph over from one page to the next. Pages with runover paragraphs cannot be sent to the printer. If a paragraph is too long for one page, split it arbitrarily. Very likely it's a poor paragraph anyway if it's that long. Do not use Scotch tape for any purpose on manuscripts.

Leave about 3 inches of space at the top of the first page and $1 \frac{1}{2}$ -inch margins at the sides. Other pages should have $1 \frac{1}{2}$ -inch margins at the top and sides. Don't cramp pages, please; ample space is needed for marking type and instructions to the printer.

The number given the manuscript in this prospectus should appear in the upper right-hand corner of the first page.

Also, at the top right of page 1 of the manuscript, write in pencil the number of words the manuscript contains. Count all words, including a, the, etc. Include in the total the equivalent in words of any tables. If, say, there is one full-page table, include in the total the number of words that a normal page of text contains.

Underscoring means italics - use it sparingly and advisedly, and not for emphasis.

Do not staple the pages of the manuscript together. Use paper clips.

Captions for photographs go on separate sheets - one caption only on a page. Tables and author's notes also go on separate sheets. Do not write with hard pencil on the backs of photographs.

Indicate subheads by skipping a few lines and underlining the first few words - three lines under letters that are capitalized and two lines under the others (to indicate small capitals). The lines may be drawn in ink.

The sample pages of manuscript that follow show a model page 1 and a later page, on which a subhead occurs.

3,560 words

How We Develop Insecticides

Jacques McGillicuddy

New insecticides are developed in two ways.

The first is by determining the structure of the active principles of plants recognized as toxic to insects. Then the principles or other compounds closely related to them are synthesized — put together again to make the whole.

The second is by testing compounds of known structure and unknown toxicity upon several species of insects and selecting the ones that are effective.

The first method starts with a material of known toxicity but unknown structure. The second starts with a compound of known structure but unknown toxic value.

(Sample manuscript, continued)

The division of insecticide investigations of the Bureau of Entomology and Plant Quarantine received from Mexico City in 1943 the roots of a plant reported to be used by Mexicans as an insecticide.

The first synthetic organic compounds used to kill insects were employed as fumigants.

Carbon disulfide, made by the direct combination of carbon and sulfur, may be regarded as one of the simplest organic compounds. It was first used as an insecticide nearly 100 years ago in France. Paradichlorobenzene, originally a byproduct in the manufacture of chlorobenzene, was used as a substitute for naphthalene in combating clothes moths in Germany in 1911.

(Note: The questions and statements after the chapter numbers are merely guides to content and are not to be used as titles of the articles themselves.)

I.

1. Food in our lives.

This is, first of all, an interesting, readable chapter that lays the foundation for the information that is given in later chapters. It will be written in simple, warm, straightforward language so the reader is encouraged to go on. It gives many examples, anecdotes, and references that pertain to experiences of persons, tribes, and communities with good and inadequate nutrition. Indirectly it defines terms and concepts that will be used in later chapters, and so fulfills the function of an introduction. It will not be a summary of the rest of the book.

It will try to give the public - primarily homemakers - an appreciation of the progress that has been made in the production of the needed assortment of safe, nutritious foods, and what this means in terms of the well-being of the Nation; to guide individuals in making the best use of food supplies for themselves and those they serve; and to provide an understanding of the part production, processing, marketing, and related activities have in supplying the nutritious, attractive, and palatable food that people need and want.

Brief mention may be made of our future food needs, the problems and possibilities for meeting them in times of prosperity, and the problems during possible national emergencies.

Its purpose will be fulfilled if it establishes, to the satisfaction of every reader, the importance of food.

2. What do Americans eat?

This chapter, a close sequel to chapter 1, considers the kinds and average amounts of food eaten in American households - what families spend on food; the differences in amounts, costs, and kinds in the several regions; the differences among city people and farm people and differences according to income, purchasing power, and status of consumers. The meaning of these points is brought out.

3. How well fed are Americans?

The meaning of details gathered in studies of the consumption of food in households and by individuals; an appraisal of the nutritive adequacy of diets in the United States; city-farm and regional comparisons; the relationship of income and other factors that affect nutritive intake; changes in adequacy of diets among different population groups over time; the contribution of enrichment programs. Such details - and perhaps others - are given as extensively as necessary to prove the thesis that studies of food consumption are a basis for specific recommendations to improve the diets and nutritional state of population groups.

4. How well nourished are we as individuals?

An evaluation of the nutritional status of individuals in various population groups in the United States - the findings of clinical, dental, biochemical, and dietary surveys as to various age and activity groups. The reported associations between physical, biochemical, dietary and environmental aspects. How these and perhaps other studies provide a basis for specific recommendations to improve diets of individuals - how, in other words, we found out about an individual's dietary needs.

5. What do vital statistics tell us about health?

Records on rates of selected diseases and what they suggest about diets. Trends for infant mortality, morbidity and the life span as measures of general health.

6. How have the heights and weights of Americans changed, and why?

Factors that affect the growth patterns of children and the size of adults, such as the decade of measurement, geographic region, and socioeconomic status. The implications for nutrition of trends in heights and weights.

II.

7. What makes food good?

The bases of the quality of food - color, size, freshness, succulence, texture, variety, flavor, keeping qualities, nutritive value. The influences of geography, culture, advertising, race, and habit in setting acceptable standards of quality for individuals and groups.

8. How do elements of production affect the quality and cost of foods from plants?

How climate, soil, light intensity, air temperature, humidity, soil temperature and moisture, macro- and micronutrients, inorganic and organic fertilizers, variety and selective breeding, growth stimulants, insecticides, maturity at harvest (which may be related to season and planting and harvesting dates) and postharvest practices before the commodity leaves the farm affect specific nutrients in foods (e.g., minerals, vitamins, and constituents) and certain parts of plants (leaf, storage root or tuber, seed, fruit). Aspects that have aroused interest recently - e.g., claims for organic gardening and a suspicion in some quarters of chemical fertilizers, limestone in pastures, iodine.

9. How do factors of production affect the quality and cost of foods of animal origin?

Breed and genetic factors; feeding practices, including amount and nutritive quality of the feed and the effect of feed combinations and feed adjuvants (hormones, antibiotics); management practices; particular food components - mineral, vitamin, or approximate constituent - involved; the relationships among soils, the feeds produced thereon, and the nutritive value of the animal products.

10. How does commercial processing affect the quality and cost of food?

The advantages and limitations of commercial processing and preservation (including additives) on quality and cost of food.

Is it actually true that the quality of products has been raised in recent years? What further changes can we expect in current practices for different types of food? The chapter will avoid the usual platitudes and assumptions so often expressed of late and give a close, hard look at (for example) new things that have been done to bread, canned fruits, certain meats, flour, and milk. All these additions and changes may be good, but, if so, some doubters need to be convinced.

11. How does marketing affect the quality and cost of food?

Effects of current practices in handling, transporting, storing, packaging, and merchandizing on the preservation of nutritive value, flavor, and market quality and cost in processed and unprocessed foods; the outlook for continued improvement in the quality of products - or the outlook for changes in practices that lower quality. What should the food buyer be aware of? This will be more than a merely descriptive, noncommittal exposition.

III.

12-18. The responsibilities of six Government agencies to the consumer, the contributions and techniques used in their programs of protecting food, and their efforts to protect and inform consumers about food. Examples of specific activities, such as inspecting, grading, setting standards of identity, furnishing advisory and consultative services to manufacturers making safety provisions for pesticide residues or chemical additives (intentional and unintentional), labeling, etc.

These are factual, interesting, and disinterested presentations of the work of each, without any special pleading, plea (overt or otherwise) for more appropriations or more research, or more authority. They must not smack of the usual annual bureau reports or recital of activities or justifications. They are intended to be helpful expositions for the average consumer. A narrative flavor may be good. Emphasis on great men and accomplishments may attract interest and point up the purpose.

12. General view of the subject - but not a duplication or summary of details given in 13-18. Perhaps historical aspects that led to the creation of the functions (but not the agencies themselves); pressures (e.g., among women and other consumers) that led to food laws and regulatory services; the need for Federal action as against State or city supervision.

- 13. Activities of the Agricultural Research Service that consumers should know about.
- 14. Activities of the Agricultural Marketing Service that consumers should know about.
- 15. Activities of the Food and Drug Administration that consumers should know about.
- 16. Activities of the Federal Trade Commission. Importance of fair and vigorous competition; truth in advertising; avoidance of disparagement of competing products; prevention of monopolistic practices in selling; how the consumer can get help when he suspects illegal or unfair practices; perhaps examples of illegal and sharp practices among food packers and dealers; let the buyer be wary.
 - 17. Activities of the Public Health Service that consumers should know about.
 - 18. Activities of the Bureau of Commercial Fisheries that consumers should know about.

IV.

19. What is the importance of the science of nutrition?

The development of the science of nutrition; discovery of different nutrients; determination of quantitative requirements; growing complexity of the science as we become aware of interrelationships of nutrients, of body processes, hormones, enzymes, etc.; new tools available for further research; attention given to human nutrition during the depression, the Second World War, and since; the kinds of financial support that have been given at different stages in the development of this science. A chronology of important events and personalities in nutrition will be helpful and interesting.

This chapter is a challenge and a wonderful opportunity. It is a key chapter in the book, for it can show all of us that the basis of nutrition is an established, valid, highly important science, regardless of our previous ideas and prejudices. It can be of great use to the profession, although to the general reader that is a secondary purpose. It can give a firm foundation to all the chapters. One device in writing, which perhaps may not be usable, is to tell all in terms of a few outstanding contributors to the science, i.e., people and publications. The contributions of living persons should be included. It should be an exciting, informative chapter. It can be long and packed with warm, human detail of successes, failures, and aspirations.

V.

20-29. What have we learned about each of the nutrients?

Emphasis in each should be placed on the current state of knowledge in relation to human nutrition. Known functions of the nutrients and interrelationships with other nutrients; human requirements and recommended allowances; factors that affect requirements; major food sources of the nutrients; interesting and pertinent details of their discovery. These sections may be more technical than chapters 32-36 on the nutritional needs of different age groups, but a textbookish tone should be avoided. They will give a background for understanding the specific nutritional needs of the body (as contrasted with the food needs) and how the needs have been determined and interpreted.

- 20. Food energy and relation of calories to body weight (includes alcohol as source of energy).
 - 21. Protein and amino acids.
 - 22. Fats and fatty acids.
 - 23. Carbohydrate (includes fiber).

- 24. Water.
- 25. Major minerals.
- 26. Trace minerals.
- 27. Fat-soluble vitamins.
- 28. Vitamins of the B complex.
- 29. Vitamin C.
- 30. Unidentified factors.

VI.

31. The composition and nutritive value of foods.

Tables that give the amounts of nutrients supplied by common household measures of foods.

VII.

32-36. How can I be sure of a good diet?

The results of dietary studies and the physiological basis for special nutritional needs of persons of different ages; the amount and assortment of foods to meet the needs. These sections will emphasize food needs for health and some of the reasons for them. Each will be a complete, self-contained presentation, useful to a lay reader of any age and to instructors, extension and social workers, mothers, and others who require full chapters for review and reference and who cannot assemble the information from the individual sections on each of the nutrients. This section will have all the foods necessary to meet the quantitative and qualitative needs for foods. The chapters will contain a wealth of practical information.

- 32. Nutritional needs of adults (25 years of age and older).
- 33. Nutritional needs of nursing and expectant mothers,
- 34. Nutritional needs of infants and toddlers.
- 35. Nutritional needs of preschool and young school children (until adolescence).
- 36. Nutritional needs of adolescents and young adults (up to 25 years).
- 37. Guides to good nutrition.

How research findings on nutritional requirements, nutrients in foods, and patterns of food consumption have been used to formulate general guides for selecting food. Grouping foods of similar nutritive value simplifies the choice of a variety of foods that will insure an adequate diet and permit some free choice. The suitability of different guides for different situations. The information given here is more specific than the foregoing sentences indicate; the guides are in terms of servings. It should not duplicate material in the preceding sections.

38. What does my food money buy?

The values that our money can buy when we buy food: Maintenance of market quality, variety, convenience, prepreparation, social or recreational value, prestige items, out-of-season foods. A comparison of trends in food costs and trends in city wages and incomes; reasons for increases in the retail prices of foods; the widening spread between the farmer and the consumer since the war; basic costs in marketing. Improvements in efficiency from changes in processing and distribution; savings made by such improvements are more than offset by higher cost rates and by more services.

This material was included in <u>Marketing</u>; here, if it is given, at all, it is presented so as to be of interest and help to homemakers and general readers and written without economic jargon.

39. How can I get the most nutritive value for the money I spend on food?

The relative economy of foods in terms of nutrients they provide for the money spent.

40. How can I use a food budget?

Budget plans at different levels of costs - based on new information on nutritional needs, relative prices, and our food patterns. How to group foods to permit the widest possible choice and still insure nutritionally adequate meals. Each plan will suggest weekly amounts of eleven groups of foods for individuals of both sexes and different ages. Practical, usable, and complete details on the use of budgets in planning for needs and wants of families of different sizes and members of different ages.

41. How can I prepare food to keep its full nutritive value?

Effects of handling, storing, and preparing food on its nutritive content; some methods of handling and preparation that materially affect retention of nutrients; trimming of vegetables and meats; amount of water used in cooking; length of cooking period; exposure to light and heat and air; and many more.

42. How do I freeze, can, and store foods at home?

The importance of scientifically developed methods, advantages and limitations of different methods for different foods, guides to help the homemaker select the most suitable methods. Practical, step-by-step information on canning, drying, and freezing. Precautions to be observed in storing.

43. How can I plan meals better?

Knowing the details about our needs and the composition of foods adds meaning to the job of feeding the family; knowing how to plan meals and managing time and facilities makes the work easier and pleasanter.

Meals should be planned with thought given to variety in texture, color, flavor, and temperature, which is a valuable ingredient of meals, a keynote to attractive ones, and interesting, pleasant variations on the main theme of good food simply prepared. Food should taste good, smell good, look good, and be served in a pleasant atmosphere. That takes planning - and this is the way to plan.

What about all these new diets and fancy ideas I read about in books and magazines?

Food fads and fallacies. The origin and types of misinformation; how we can counteract them. The chapter should be specific about the fads. This could be a delightful, provocative, illuminating essay;

44a. Weight control; reducing and gaining diets.

VIII.

45. How can I learn more about nutrition programs and problems?

Nutrition programs and activities of various governmental and non-governmental agencies, organizations, and groups, and how they contribute to a better understanding of nutrition. The writer will bear in mind that this book is for homemakers and other consumers; it is not intended to be a guide for teachers, although teachers will get much material and may be able to use the book in classes. If this chapter is written primarily for persons in the profession, its place in the book is doubtful despite its undisputed importance. Writers of chapters 45, 46, and 47 should be especially careful not to duplicate the others' material.

46. Education in nutrition for adults.

Objectives, methods, motivations, coordination of efforts, public and private support, source material, evaluation. Special needs, modifications, and examples for use with adult groups. (Please read the note in item 45).

47. Education in nutrition for young people.

Objectives, methods, information on which to build a program, coordination of efforts, public and private support, source material, evaluation. Special needs, motivations, methods used for inschool and out-of-school programs. (Please read the note in item 45.)

IX.

48. How does the school lunch program help me and my children?

Early developments of school food services. Type of Federal assistance provided under National School Lunch Act - cash, commodities, and technical assistance. The Special Milk Program. Improved operating standards for school food services. The significance of the Type-A meal. Impact on nutritional status of children, including educational implications. Place of feeding services in total educational program of elementary and secondary schools. Probable growth of the program and future trends. This will be more than a mere descriptive survey - an analysis of values and shortcomings, guidance for administrators and parents, place in national nutrition, findings applicable to other institutional feeding.

49. What have we learned about - and from - domestic and overseas food donation programs?

The scope, philosophy, legislative authorities, and limitations. Early development of domestic program as a relief measure. Limitation of the programs as nutritional measures - their supplemental nature because availability of foods for donation is based on direct Federal action to stabilize agricultural markets. Responsibilities assumed by State and local groups in distributing surpluses. The impact on national food consumption - in school lunch programs and direct distribution among the needy. Overseas donations of food surpluses through governments and private welfare agencies for needy persons, for schools, and disaster relief.

50. How do other programs raise dietary levels in other countries?

Cooperation of the Department of Agriculture with International Cooperation Administration and other agencies in providing technical assistance to other countries. United States' participation in the work of the Food and Agriculture Organization; purpose and accomplishments of food and nutrition programs of FAO, WHO, UNICEF, and other international organizations. Programs of private foundations to further research and education. Effect of market promotion work in other countries on dietary levels. (Beware of duplication with chapter 49% Special care is needed here to make the chapter understandable and useful to the average American reader; it is not for specialists.)

51. Trends in food consumption in the United States.

Important changes in national food consumption since 1900. Trends in the per capita consumption of major groups of food, summarized by using various measures of total food consumption, including pounds, and the AMS price-weighted index; analysis of reasons for changes in national food consumption. Trends in food uses - household use versus food consumed away from home, school lunch, public eating places, industrial feeding, etc. (Changes in the nutritive value of per capita food consumption will be included in the following section.)

52. Trends in the nutritive content of food supplies.

The nutritional interpretation of trends in per capita food consumption in the United States over the past half century. Changes in the nutritional contribution of different food groups in relation to changing consumption of various types of food. The increasing proportion of calories from fat and shifts between vegetables and animal foods as sources of protein. Trends in the nutritive content of per capita food supplies related to changing needs of the population (i.e., changes with respect to the age distribution, activity level, etc.)

53. Trends in food practices in farm homes.

Trends in sources of farm family food - home-produced, purchased for use at home, meals away from home, in canning and freezing practices; in home baking and purchase of ready-baked foods.

54. Development and merchandizing of new or improved food products or new food processes.

Research in chemistry, physics, bacteriology, engineering, and related fields helps in the study of the basic characteristics of agricultural products which make possible new uses, and new or improved products or processes in the food field. Examples of development and marketing of new products.

55. Trends in food preferences.

Changing consumer preferences and changing processing techniques make it desirable to alter production process or marketing methods to better adapt agricultural products to processor and consumer needs. The farmer, processor, and retailer must be alert to such changes and adapt their practices accordingly. The consumer needs to understand the changes which are occurring and the part he plays consciously and unconsciously, in accepting or demanding and paying for new or improved products. Market incentives (or lack of them) for production of preferred qualities should be considered.

56. Future food needs and implications for agriculture, food industries, and national food policy.

The Department's recent projections of food consumption in 1975 with basic assumptions as to probable trends in population, in productivity, and in incomes; our present judgment as to food needs in relation to trends in food consumption from now through 1975; some attention to the question of production and use of foods in abundance; the possible effects of Government food distribution programs, and of stepped-up nutritional education, and whether the future will bring food surpluses, or whether we will be confronted with the danger of shortages. Problems of developing balance between food supplies and food consumption in times of prosperity and in times of stress and emergency. (Some of this is being covered in the 1958 Yearbook.)

57.

58.

59.

60.



